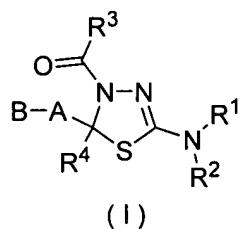


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A thiadiazoline derivative represented by the general formula (I), or a pharmacologically acceptable salt thereof:



<wherein,

R¹ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl,

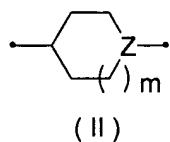
R² represents a hydrogen atom, or -COR⁵ (wherein R⁵ represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl), or

R¹ and R² are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group,

R³ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl,

R⁴ represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group,

A represents -(CH₂)_n- (wherein n represents an integer of 1 to 6), or a group of the formula (II)



(wherein m represents an integer of 0 to 2, and Z represents CH or a nitrogen atom capable of binding to B), and

(i) when A is -(CH₂)_n-, and n is 1 or 2,

B represents -NR⁶R⁷ {wherein R⁶ represents a hydrogen atom, or lower alkyl, R⁷ represents substituted lower alkyl, -COR⁸ [wherein R⁸ represents substituted lower alkyl (provided that R⁸ is not trifluoromethyl), substituted lower alkoxy, substituted or unsubstituted aryloxy, a substituted or unsubstituted heterocyclic group, or

-NR⁹R¹⁰ (wherein R⁹ and R¹⁰ are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl,

substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R⁹ and R¹⁰ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)], or R⁶ and R⁷ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group},

-OR¹¹ (wherein R¹¹ represents substituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted lower alkylcarbamoyl, substituted or unsubstituted di-(lower alkyl)carbamoyl, or substituted or unsubstituted heterocyclylcarbonyl),

-SR¹² (wherein R¹² has the same meaning as that of the aforementioned R¹¹), or

CH=NR¹³ (wherein R¹³ represents hydroxy, or substituted or unsubstituted lower alkoxy),

(ii) when A is -(CH₂)_n-, and n is an integer of 3 to 6 ,

B represents -NR¹⁴R¹⁵ {wherein R¹⁴ and R¹⁵ are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -COR¹⁶ [wherein R¹⁶ represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or

unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryloxy, or $-\text{NR}^{17}\text{R}^{18}$ (wherein R^{17} and R^{18} are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^{17} and R^{18} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)], or $-\text{SO}_2\text{R}^{19}$ [wherein R^{19} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, or $-\text{NR}^{20}\text{R}^{21}$ (wherein R^{20} and R^{21} are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl, or R^{20} and R^{21} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)], or R^{14} and R^{15} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group}, $-\text{OR}^{22}$ (wherein R^{22} has the same meaning as that of the aforementioned R^{11}),

-SR²³ (wherein R²³ has the same meaning as that of the aforementioned R¹¹), or

-CH=NR²⁴ (wherein R²⁴ has the same meaning as that of the aforementioned R¹³),

(iii) when A is a group of the formula (II),

B represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkanoyl, substituted or unsubstituted lower alkoxycarbonyl, or substituted or unsubstituted lower alkylsulfonyl>.

2. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1, wherein R¹ is a hydrogen atom, or lower alkyl.

3. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 or 2, wherein R² is -COR⁵ (wherein R⁵ has the same meaning as that mentioned above).

4. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 3, wherein R⁵ is lower alkyl.

5. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 3, wherein R⁵ is tert-butyl.
6. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 any one of claims 1 to 5, wherein R³ is lower alkyl.
7. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 any one of claims 1 to 5, wherein R³ is tert-butyl.
8. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 any one of claims 1 to 7, wherein R⁴ is substituted or unsubstituted aryl.
9. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 any one of claims 1 to 7, wherein R⁴ is phenyl.
10. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 any one of claims 1 to 9, wherein A is -(CH₂)_n- (wherein n has the same meaning as that mentioned above).

11. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 10, wherein n is 1 or 2.

12. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 11, wherein B is -NR⁶R⁷ (wherein R⁶ and R⁷ have the same meanings as those mentioned above, respectively).

13. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 12, wherein R⁶ is a hydrogen atom.

14. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 12 or 13, wherein R⁷ is -COR⁸ (wherein R⁸ has the same meaning as that mentioned above).

15. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 12, wherein R⁶ and R⁷ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group.

16. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 10, wherein n is an integer of 3 to 6.

17. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 10, wherein n is 3.

18. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 16 or 17, wherein B is -NR¹⁴R¹⁵ (wherein R¹⁴ and R¹⁵ have the same meanings as those mentioned above, respectively).

19. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18, wherein R¹⁴ is a hydrogen atom.

20. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18 or 19, wherein R¹⁵ is substituted or unsubstituted lower alkyl.

21. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18 or 19, wherein R¹⁵ is -COR¹⁶ (wherein R¹⁶ has the same meaning as that mentioned above).

22. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 21, wherein R¹⁶ is a substituted or unsubstituted heterocyclic group.

23. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 21, wherein R¹⁶ is -NR¹⁷R¹⁸ (wherein R¹⁷ and R¹⁸ have the same meanings as those mentioned above, respectively).

24. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 18 or 19, wherein R¹⁵ is -SO₂R¹⁹ (wherein R¹⁹ has the same meaning as that mentioned above).

25. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 any one of claims 1 to 9, wherein A is a group of the formula (II).

26. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 25, wherein Z is a nitrogen atom.

27. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 25 or 26, wherein B is a hydrogen atom, or substituted or unsubstituted lower alkyl.

28. (Currently Amended) A pharmaceutical composition which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ as an active ingredient.

29. (Currently Amended) A mitotic kinesin Eg5 inhibitor which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ as an active ingredient.

30. (Currently Amended) An antitumor agent which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ as an active ingredient.

31. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~.

32. (Currently Amended) A method for therapeutic treatment of a malignant tumor which comprises administering an effective amount of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~.

33. (Currently Amended) Use of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ for the manufacture of a mitotic kinesin Eg5 inhibitor.

34. (Currently Amended) Use of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 27~~ for the manufacture of the antitumor agent.